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Analysis Report

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ANALYTICAL RESULTS

Prepared by:

Eurofins Lancaster Laboratories Environmental
2425 New Holland Pike
Lancaster, PA 17601

Prepared for:

Stantec
1060 Andrew Drive
Suite 140
West Chester PA 19380

Report Date: April 27, 2017

Project: MHIC AOI 5

Submittal Date: 04/20/2017
Group Number: 1791580
PO Number: MHIC AOI 5
State of Sample Origin: PA

Client Sample Description	Lancaster Labs (LL) #
AOI5-BH-17-010-1.0-2.0 Grab Soil	8950313
AOI5-BH-17-011-1.0-2.0 Grab Soil	8950314
AOI5-BH-17-012-1.0-2.0 Grab Soil	8950315
AOI5-BH-17-013-1.0 Grab Soil	8950316

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

Regulatory agencies do not accredit laboratories for all methods, analytes, and matrices. Our current scopes of accreditation can be viewed at http://www.eurofinsus.com/environment-testing/laboratories/eurofins-lancaster-laboratories-environmental/resources/certifications/ . To request copies of prior scopes of accreditation, contact your project manager.

Electronic Copy To	Sunoco c/o Stantec	Attn: Jenny DeBoer
Electronic Copy To	Stantec	Attn: Andrew Bradley
Electronic Copy To	Sunoco c/o Stantec	Attn: Jennifer Menges

Respectfully Submitted,

Amek Carter
Specialist

(717) 556-7252

Sample Description: AOI5-BH-17-010-1.0-2.0 Grab Soil
MHIC - AOI 5

LL Sample # SW 8950313
LL Group # 1791580
Account # 16657

Project Name: MHIC AOI 5

Collected: 04/20/2017 08:50 by AP

Submitted: 04/20/2017 18:10
Reported: 04/27/2017 12:03

Stantec
1060 Andrew Drive
Suite 140
West Chester PA 19380

B1710

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**mg/kg**		**mg/kg**	
10237	Benzene	71-43-2	N.D.		0.0006	1.18
10237	Naphthalene	91-20-3	0.003	J	0.001	1.18
GC/MS Semivolatiles	**SW-846 8270C**		**mg/kg**		**mg/kg**	
10724	Anthracene	120-12-7	0.010	J	0.003	1
10724	Benzo(a)anthracene	56-55-3	0.019		0.003	1
10724	Benzo(a)pyrene	50-32-8	0.019		0.003	1
10724	Benzo(b)fluoranthene	205-99-2	0.023	Q4	0.003	1
10724	Benzo(g,h,i)perylene	191-24-2	0.022		0.003	1
10724	Chrysene	218-01-9	0.039		0.003	1
10724	Fluorene	86-73-7	0.007	J	0.003	1
10724	Phenanthrene	85-01-8	0.033		0.003	1
10724	Pyrene	129-00-0	0.070		0.003	1
Wet Chemistry	**SM 2540 G-1997**		**%**		**%**	
00111	Moisture	n.a.	5.1		0.50	1

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

Sample Comments

PA DEP Lab Certification ID 36-00037, Expiration Date: 1/31/18.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10237	UST Benzene/Naphthalene 8260	SW-846 8260B	1	X171141AA	04/24/2017 13:49	Jennifer K Howe	1.18
07578	GC/MS-HL Encore Prep-NC	SW-846 5035A	1	201711045047	04/20/2017 22:36	Lois E Hiltz	n.a.
08389	Low Level Encore Prep	SW-846 5035A	1	201711045047	04/20/2017 22:37	Lois E Hiltz	n.a.
08389	Low Level Encore Prep	SW-846 5035A	2	201711045047	04/20/2017 22:37	Lois E Hiltz	n.a.
10724	PAH 8270 (microwave)	SW-846 8270C	1	17111SLC026	04/22/2017 02:32	Linda M Hartenstine	1
10814	BNA Soil Microwave PAH	SW-846 3546	1	17111SLC026	04/21/2017 16:15	Elizabeth E Donovan	1
00111	Moisture	SM 2540 G-1997	1	17111820002B	04/21/2017 13:20	Larry E Bevins	1

Sample Description: AOI5-BH-17-011-1.0-2.0 Grab Soil
MHIC - AOI 5

LL Sample # SW 8950314
LL Group # 1791580
Account # 16657

Project Name: MHIC AOI 5

Collected: 04/20/2017 09:05 by AP

Submitted: 04/20/2017 18:10
Reported: 04/27/2017 12:03

Stantec
1060 Andrew Drive
Suite 140
West Chester PA 19380

B1711

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**mg/kg**	**mg/kg**	
10237	Benzene	71-43-2	N.D.	0.0005	0.97
10237	Naphthalene	91-20-3	N.D.	0.001	0.97
GC/MS Semivolatiles	**SW-846 8270C**		**mg/kg**	**mg/kg**	
10724	Anthracene	120-12-7	0.049	0.004	1
10724	Benzo(a)anthracene	56-55-3	0.095	0.004	1
10724	Benzo(a)pyrene	50-32-8	0.10	0.004	1
10724	Benzo(b)fluoranthene	205-99-2	0.12 Q4	0.004	1
10724	Benzo(g,h,i)perylene	191-24-2	0.11	0.004	1
10724	Chrysene	218-01-9	0.16	0.004	1
10724	Fluorene	86-73-7	0.047	0.004	1
10724	Phenanthrene	85-01-8	0.23	0.004	1
10724	Pyrene	129-00-0	0.30	0.004	1
Wet Chemistry	**SM 2540 G-1997**		**%**	**%**	
00111	Moisture	n.a.	9.2	0.50	1

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

Sample Comments

PA DEP Lab Certification ID 36-00037, Expiration Date: 1/31/18.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10237	UST Benzene/Naphthalene 8260	SW-846 8260B	1	X171141AA	04/24/2017 14:12	Jennifer K Howe	0.97
07578	GC/MS-HL Encore Prep-NC	SW-846 5035A	1	201711045047	04/20/2017 22:39	Lois E Hiltz	n.a.
08389	Low Level Encore Prep	SW-846 5035A	1	201711045047	04/20/2017 22:40	Lois E Hiltz	n.a.
08389	Low Level Encore Prep	SW-846 5035A	2	201711045047	04/20/2017 22:40	Lois E Hiltz	n.a.
10724	PAH 8270 (microwave)	SW-846 8270C	1	17111SLC026	04/22/2017 02:52	Linda M Hartenstine	1
10814	BNA Soil Microwave PAH	SW-846 3546	1	17111SLC026	04/21/2017 16:15	Elizabeth E Donovan	1
00111	Moisture	SM 2540 G-1997	1	17111820002B	04/21/2017 13:20	Larry E Bevins	1

Sample Description: AOI5-BH-17-012-1.0-2.0 Grab Soil
MHIC - AOI 5

LL Sample # SW 8950315
LL Group # 1791580
Account # 16657

Project Name: MHIC AOI 5

Collected: 04/20/2017 09:30 by AP

Submitted: 04/20/2017 18:10
Reported: 04/27/2017 12:03

Stantec
1060 Andrew Drive
Suite 140
West Chester PA 19380

B1712

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**mg/kg**	**mg/kg**	
10237	Benzene	71-43-2	N.D.	0.0005	1.02
10237	Naphthalene	91-20-3	N.D.	0.001	1.02
GC/MS Semivolatiles	**SW-846 8270C**		**mg/kg**	**mg/kg**	
10724	Anthracene	120-12-7	0.011 J	0.003	1
10724	Benzo(a)anthracene	56-55-3	0.027	0.003	1
10724	Benzo(a)pyrene	50-32-8	0.030	0.003	1
10724	Benzo(b)fluoranthene	205-99-2	0.040 Q4	0.003	1
10724	Benzo(g,h,i)perylene	191-24-2	0.036	0.003	1
10724	Chrysene	218-01-9	0.050	0.003	1
10724	Fluorene	86-73-7	0.011 J	0.003	1
10724	Phenanthrene	85-01-8	0.054	0.003	1
10724	Pyrene	129-00-0	0.080	0.003	1
Wet Chemistry	**SM 2540 G-1997**		**%**	**%**	
00111	Moisture	n.a.	4.7	0.50	1

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

Sample Comments

PA DEP Lab Certification ID 36-00037, Expiration Date: 1/31/18.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10237	UST Benzene/Naphthalene 8260	SW-846 8260B	1	X171141AA	04/24/2017 14:35	Jennifer K Howe	1.02
07578	GC/MS-HL Encore Prep-NC	SW-846 5035A	1	201711045047	04/20/2017 22:43	Lois E Hiltz	n.a.
08389	Low Level Encore Prep	SW-846 5035A	1	201711045047	04/20/2017 22:43	Lois E Hiltz	n.a.
08389	Low Level Encore Prep	SW-846 5035A	2	201711045047	04/20/2017 22:44	Lois E Hiltz	n.a.
10724	PAH 8270 (microwave)	SW-846 8270C	1	17111SLC026	04/22/2017 03:12	Linda M Hartenstine	1
10814	BNA Soil Microwave PAH	SW-846 3546	1	17111SLC026	04/21/2017 16:15	Elizabeth E Donovan	1
00111	Moisture	SM 2540 G-1997	1	17111820002B	04/21/2017 13:20	Larry E Bevins	1

Sample Description: AOI5-BH-17-013-1.0 Grab Soil
MHIC - AOI 5

LL Sample # SW 8950316
LL Group # 1791580
Account # 16657

Project Name: MHIC AOI 5

Collected: 04/20/2017 10:10 by AP

Submitted: 04/20/2017 18:10
Reported: 04/27/2017 12:03

Stantec
1060 Andrew Drive
Suite 140
West Chester PA 19380

B1713

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**mg/kg**	**mg/kg**	
10237	Benzene	71-43-2	N.D.	0.0006	1.06
10237	Naphthalene	91-20-3	0.002 J	0.001	1.06
GC/MS Semivolatiles	**SW-846 8270C**		**mg/kg**	**mg/kg**	
10724	Anthracene	120-12-7	0.023	0.004	1
10724	Benzo(a)anthracene	56-55-3	0.034	0.004	1
10724	Benzo(a)pyrene	50-32-8	0.036	0.004	1
10724	Benzo(b)fluoranthene	205-99-2	0.031 Q4	0.004	1
10724	Benzo(g,h,i)perylene	191-24-2	0.043	0.004	1
10724	Chrysene	218-01-9	0.081	0.004	1
10724	Fluorene	86-73-7	0.015 J	0.004	1
10724	Phenanthrene	85-01-8	0.056	0.004	1
10724	Pyrene	129-00-0	0.13	0.004	1
Wet Chemistry	**SM 2540 G-1997**		**%**	**%**	
00111	Moisture	n.a.	6.6	0.50	1

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

Sample Comments

PA DEP Lab Certification ID 36-00037, Expiration Date: 1/31/18.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10237	UST Benzene/Naphthalene 8260	SW-846 8260B	1	X171141AA	04/24/2017 14:58	Jennifer K Howe	1.06
07578	GC/MS-HL Encore Prep-NC	SW-846 5035A	1	201711045047	04/20/2017 22:46	Lois E Hiltz	n.a.
08389	Low Level Encore Prep	SW-846 5035A	1	201711045047	04/20/2017 22:46	Lois E Hiltz	n.a.
08389	Low Level Encore Prep	SW-846 5035A	2	201711045047	04/20/2017 22:47	Lois E Hiltz	n.a.
10724	PAH 8270 (microwave)	SW-846 8270C	1	17111SLC026	04/22/2017 04:11	Linda M Hartenstine	1
10814	BNA Soil Microwave PAH	SW-846 3546	1	17111SLC026	04/21/2017 16:15	Elizabeth E Donovan	1
00111	Moisture	SM 2540 G-1997	1	17111820002B	04/21/2017 13:20	Larry E Bevins	1

Quality Control Summary

Client Name: Stantec
Reported: 04/27/2017 12:03

Group Number: 1791580

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

Method Blank

Analysis Name	Result	MDL
	mg/kg	mg/kg
Batch number: X171141AA	Sample number(s): 8950313-8950316	
Benzene	N.D.	0.0005
Naphthalene	N.D.	0.001
Batch number: 17111SLC026	Sample number(s): 8950313-8950316	
Anthracene	N.D.	0.003
Benzo(a)anthracene	N.D.	0.003
Benzo(a)pyrene	N.D.	0.003
Benzo(b)fluoranthene	N.D.	0.003
Benzo(g,h,i)perylene	N.D.	0.003
Chrysene	N.D.	0.003
Fluorene	N.D.	0.003
Phenanthrene	N.D.	0.003
Pyrene	N.D.	0.003

LCS/LCSD

Analysis Name	LCS Spike Added	LCS Conc	LCSD Spike Added	LCSD Conc	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
	mg/kg	mg/kg	mg/kg	mg/kg					
Batch number: X171141AA	Sample number(s): 8950313-8950316								
Benzene	0.0200	0.0177	0.0200	0.0180	88	90	80-120	2	30
Naphthalene	0.0200	0.0183	0.0200	0.0183	92	91	61-125	0	30
	mg/kg	mg/kg	mg/kg	mg/kg					
Batch number: 17111SLC026	Sample number(s): 8950313-8950316								
Anthracene	1.67	1.74			105		82-118		
Benzo(a)anthracene	1.67	1.74			105		76-119		
Benzo(a)pyrene	1.67	1.62			97		78-117		
Benzo(b)fluoranthene	1.67	1.66			100		79-121		
Benzo(g,h,i)perylene	1.67	1.58			95		71-123		
Chrysene	1.67	1.74			104		72-121		
Fluorene	1.67	1.73			104		75-118		
Phenanthrene	1.67	1.70			102		74-114		
Pyrene	1.67	1.71			103		74-112		
	%	%	%	%					
Batch number: 17111820002B	Sample number(s): 8950313-8950316								

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.
P###### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

Quality Control Summary

Client Name: Stantec
Reported: 04/27/2017 12:03

Group Number: 1791580

LCS/LCSD (continued)

Analysis Name	LCS Spike Added %	LCS Conc %	LCSD Spike Added %	LCSD Conc %	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Moisture	89.5	89.42			100		99-101		

MS/MSD

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Analysis Name	Unspiked Conc mg/kg	MS Spike Added mg/kg	MS Conc mg/kg	MSD Spike Added mg/kg	MSD Conc mg/kg	MS %Rec	MSD %Rec	MS/MSD Limits	RPD	RPD Max
Batch number: 17111SLC026	Sample number(s): 8950313-8950316 UNSPK: 8950315									
Anthracene	0.0101	1.66	1.71	1.66	1.51	102	91	82-118	12	30
Benzo(a)anthracene	0.0257	1.66	1.68	1.66	1.48	99	88	76-119	12	30
Benzo(a)pyrene	0.0289	1.66	1.57	1.66	1.38	93	82	78-117	13	30
Benzo(b)fluoranthene	0.0382	1.66	1.52	1.66	1.34	89	78*	79-121	13	30
Benzo(g,h,i)perylene	0.0342	1.66	1.69	1.66	1.47	100	87	71-123	14	30
Chrysene	0.0474	1.66	1.71	1.66	1.50	100	88	72-121	13	30
Fluorene	0.0105	1.66	1.61	1.66	1.44	97	86	75-118	11	30
Phenanthrene	0.0515	1.66	1.69	1.66	1.50	99	87	74-114	12	30
Pyrene	0.0763	1.66	1.71	1.66	1.53	98	88	74-112	11	30

Laboratory Duplicate

Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	BKG Conc %	DUP Conc %	DUP RPD	DUP RPD Max
Batch number: 17111820002B	Sample number(s): 8950313-8950316 BKG: P950733			
Moisture	91.33	91.36	0	5

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: UST Benzene/Naphthalene 8260
Batch number: X171141AA

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.
P###### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

Quality Control Summary

Client Name: Stantec
Group Number: 1791580
Reported: 04/27/2017 12:03

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed
unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: UST Benzene/Naphthalene 8260
Batch number: X171141AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
8950313	117	112	88	91
8950314	107	105	90	92
8950315	114	110	88	89
8950316	112	108	90	94
Blank	107	104	94	88
LCS	103	101	97	95
LCSD	101	98	106	95
Limits:	50-141	54-135	52-141	50-131

Analysis Name: PAH 8270 (microwave)
Batch number: 17111SLC026

	Nitrobenzene-d5	2-Fluorobiphenyl	Terphenyl-d14
8950313	96	97	92
8950314	92	94	83
8950315	98	101	93
8950316	97	100	93
Blank	78	75	74
LCS	100	97	93
MS	98	102	92
MSD	87	90	82
Limits:	45-125	50-124	43-132

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.
P###### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

Environmental Analysis Request/Chain of Custody

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For Eurofins Lancaster Laboratories Environmental use only
Acct. # 16657 Group # 1791580 Sample # 8950313-17

COC # 510691

Client Information

Client: Evergreen	Acct. #:
Project Name/#: MHIC - AOI 5	PWSID #:
Project Manager: Jennifer Menges	P.O. #:
Sampler: A. Patel	Quote #:
State where samples were collected: PA	For Compliance: Yes ☐ No ☐

Matrix: Soil ☑ Sediment ☐ Tissue ☐ Water: Potable ☐ Ground ☐ NPDES ☐ Surface ☐ Other: ____

Analysis Requested — Preservation Codes

PADEP No. 6 Oil Short List Evergreen

Sample Identification	Collected Date	Collected Time	Grab	Composite	Total # of Containers	VOCs	SVOCs	Metals
AOI5-BH-17-010-1.0-2.0	4/20/17	0850	✓		4	✓	✓	✓
AOI5-BH-17-011-1.0-2.0	4/20/17	0905	✓		4	✓	✓	✓
AOI5-BH-17-012-1.0-2.0	4/20/17	0930	✓		4	✓	✓	✓
AOI5-BH-17-013-1.0	4/20/17	1010	✓		4	✓	✓	✓

For Lab Use Only
FSC: ____
SCR#: ____

Preservation Codes
H=HCl T=Thiosulfate
N=HNO_3 B=NaOH
S=H_2SO_4 O=Other

Remarks

Turnaround Time (TAT) Requested (please circle)
Standard (Rush) 5 Day
(Rush TAT is subject to laboratory approval and surcharge.)

Date results are needed: ____

E-mail address: Jenny.DeBoer@stantec.com

Data Package Options (circle if required)
Type I (EPA Level 3 Equivalent/non-CLP) Type VI (Raw Data Only)
Type III (Reduced non-CLP) NJ DKQP TX TRRP-13
NYSDEC Category A or B MA MCP CT RCP

Relinquished by	Date	Time	Received by	Date	Time
A. Patel	4/20/17	1115		4-20-17	1115
			Hernandez	4-20-17	1710

EDD Required? (Yes) No
If yes, format: EIW2EDD

Site-Specific QC (MS/MSD/Dup)? Yes No
(If yes, indicate QC sample and submit triplicate sample volume.)

Relinquished by Commercial Carrier:
UPS ____ FedEx ____ Other ____

Temperature upon receipt 1.7 °C

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Sample Administration Receipt Documentation Log

Doc Log ID: 181396

Group Number(s): 179580

Client: Evergreen

Delivery and Receipt Information

Delivery Method:	ELLE Courier	Arrival Timestamp:	04/20/2017 18:10
Number of Packages:	1	Number of Projects:	1
State/Province of Origin:	PA		

Arrival Condition Summary

Shipping Container Sealed:	Yes	Sample IDs on COC match Containers:	Yes
Custody Seal Present:	Yes	Sample Date/Times match COC:	Yes
Custody Seal Intact:	Yes	VOA Vial Headspace ≥ 6mm:	No
Samples Chilled:	Yes	Total Trip Blank Qty:	2
Paperwork Enclosed:	Yes	Trip Blank Type:	HCl
Samples Intact:	Yes	Air Quality Samples Present:	No
Missing Samples:	No		
Extra Samples:	No		
Discrepancy in Container Qty on COC:	No		

Unpacked by Melvin Sanchez (8943) at 18:44 on 04/20/2017

Samples Chilled Details

Thermometer Types: DT = Digital (Temp. Bottle) IR = Infrared (Surface Temp) All Temperatures in °C.

Cooler #	Thermometer ID	Corrected Temp	Therm. Type	Ice Type	Ice Present?	Ice Container	Elevated Temp?
1	DT131	1.7	DT	Wet	Y	Bagged	N

2425 New Holland Pike
Lancaster, PA 17605-2425
T | 717-656-2300
F | 717-656-2681
www.LancasterLabs.com

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Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

BMQL	Below Minimum Quantitation Level	**mg**	milligram(s)
C	degrees Celsius	**mL**	milliliter(s)
cfu	colony forming units	**MPN**	Most Probable Number
CP Units	cobalt-chloroplatinate units	**N.D.**	none detected
F	degrees Fahrenheit	**ng**	nanogram(s)
g	gram(s)	**NTU**	nephelometric turbidity units
IU	International Units	**pg/L**	picogram/liter
kg	kilogram(s)	**RL**	Reporting Limit
L	liter(s)	**TNTC**	Too Numerous To Count
lb.	pound(s)	**µg**	microgram(s)
m3	cubic meter(s)	**µL**	microliter(s)
meq	milliequivalents	**umhos/cm**	micromhos/cm

< less than

> greater than

ppm parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg) or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter per liter of gas.

ppb parts per billion

Dry weight basis Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.

Laboratory Data Qualifiers:

C - Result confirmed by reanalysis
E - Concentration exceeds the calibration range
J (or G, I, X) - estimated value ≥ the Method Detection Limit (MDL or DL) and < the Limit of Quantitation (LOQ or RL)
P - Concentration difference between the primary and confirmation column >40%. The lower result is reported.
U - Analyte was not detected at the value indicated
V - Concentration difference between the primary and confirmation column >100%. The reporting limit is raised due to this disparity and evident interference…
W - The dissolved oxygen uptake for the unseeded blank is greater than 0.20 mg/L.

Additional Organic and Inorganic CLP qualifiers may be used with Form 1 reports as defined by the CLP methods.
Qualifiers specific to Dioxin/Furans and PCB Congeners are detailed on the individual Analysis Report.

Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff.

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Times are local to the area of activity. Parameters listed in the 40 CFR Part 136 Table II as “analyze immediately” are not performed within 15 minutes.

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Additional Data Qualifiers

Qualifier	Definition
B	Detection in the Blank
Q0	LCS/LCSD Low
Q1	LCS/LCSD High
Q4	MS/MSD Out of Range
Q7	LCS/LCSD RPD
Q8	DUP RPD
Q9	MS/MSD RPD